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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/672,437	09/28/2000	James R. Halladay	IR-2763(MH)	8158

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10/31/2002

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EXAMINER

NGUYEN, KIMBERLY T

ART UNIT	PAPER NUMBER
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1774

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DATE MAILED: 10/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/672,437

Applicant(s)

HALLADAY ET AL.

Examiner

Kimberly T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Response to Amendment***

This action is in response to the amendment submitted on August 13, 2002.

***Claim Rejections - 35 USC § 112***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

Due to Applicants' amendments, the previous rejections of claims 13, 15, 18-20, 30, and 44-46 based upon 35 USC 112, 2<sup>nd</sup> paragraph are withdrawn.

***Claim Rejections - 35 USC § 102***

**Claims 1-7 and 15-19** are rejected under 35 U.S.C. 102(b) as being anticipated by Dudek, U.S. Pat. No. 3,869,113 as previously stated in the Office Action submitted on February 13, 2002.

As to the newly added limitation that the composition shim has a central axis and that the circumferential fibers are oriented in a plane that is perpendicular to the central axis in claim 1, Dudek shows that the fibers are perpendicular to and *circumferentially* oriented around a central axis as shown in Figures 1 and 3A and in column 3, lines 3-13.

As to the newly added limitation in claim 15 that the "at least one fiber surrounds the central axis and is located in a single plane," Dudek shows that the fibers are *circumferentially* oriented around a central axis and lie in a single plane as shown in Figures 1 and 3A and in column 3, lines 3-13 and are parallel to one another (column 3, lines 35-40).

**Claims 30-32** are rejected under 35 U.S.C. 102(b) as being anticipated by Dudek, U.S. Pat. No. 3,869,113 as previously stated in the Office Action submitted on February 13, 2002.

***Claim Rejections - 35 USC § 103***

**Claims 1-2, 4-8, and 11-13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Dudek, U.S. Pat. No. 3,869,113 in view of Williams et al., U.S. Pat. No. 5,363,929 as previously stated in the Office Action submitted on February 13, 2002.

As to the newly added limitation in claim 13 that the fiber is “circumferential,” Dudek shows that the fibers are *circumferentially* oriented around a central axis as shown in Figures 1 and 3A and in column 3, lines 3-13.

**Claims 21-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Clinard, Jr., U.S. Pat. No. 4,108,508 in view of Dudek, U.S. Pat. No. 3,869,113 as previously stated in the Office Action submitted on February 13, 2002.

As to the newly added limitation that the composition shim has a central axis and that the circumferential fibers are oriented in a plane that is perpendicular to the central axis in claim 21, Dudek shows that the fibers are perpendicular to and *circumferentially* oriented around a central axis as shown in Figures 1 and 3A and in column 3, lines 3-13.

**Claims 21-28** are rejected under 35 U.S.C. 103(a) as being unpatentable over Clinard, Jr., U.S. Pat. No. 4,108,508 in view of Dudek, U.S. Pat. No. 3,869,113 in view of Williams et al., U.S. Pat. No. 5,363,929 as previously stated in the Office Action submitted on February 13, 2002.

As to the newly added limitation that the composition shim has a central axis and that the circumferential fibers are oriented in a plane that is perpendicular to the central axis in claim 21, Dudek shows that the fibers are perpendicular to and *circumferentially* oriented around a central axis as shown in Figures 1 and 3A and in column 3, lines 3-13.

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**Claims 30-36, 38, and 40** are rejected under 35 U.S.C. 103(a) as being unpatentable over Dudek, U.S. Pat. No. 3,869,113 in view of Williams et al., U.S. Pat. No. 5,363,929 as previously stated in the Office Action submitted on February 13, 2002.

As to the newly added limitation that the composition shim has a central axis and that the circumferential fibers are oriented in a plane that is perpendicular to the central axis in claim 30, Dudek shows that the fibers are perpendicular to and *circumferentially* oriented around a central axis as shown in Figures 1 and 3A and in column 3, lines 3-13.

**Claims 30, 33, 37, and 39** are rejected under 35 U.S.C. 103(a) as being unpatentable over Dudek, U.S. Pat. No. 3,869,113 in view of Williams et al., U.S. Pat. No. 5,363,929 as previously stated in the Office Action submitted on February 13, 2002.

As to the newly added limitation that the composition shim has a central axis and that the circumferential fibers are oriented in a plane that is perpendicular to the central axis in claim 30, Dudek shows that the fibers are perpendicular to and *circumferentially* oriented around a central axis as shown in Figures 1 and 3A and in column 3, lines 3-13.

**Claims 30 and 41-44** are rejected under 35 U.S.C. 103(a) as being unpatentable over Dudek, U.S. Pat. No. 3,869,113 in view of Clinard, Jr., U.S. Pat. No. 4,108,508 as previously stated in the Office Action submitted on February 13, 2002.

As to the newly added limitation that the composition shim has a central axis and that the circumferential fibers are oriented in a plane that is perpendicular to the central axis in claim 30, Dudek shows that the fibers are perpendicular to and *circumferentially* oriented around a central axis as shown in Figures 1 and 3A and in column 3, lines 3-13.

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As to the newly added limitation in claim 43 that the shim has “a plurality of fibers,” Dudek shows more than one circumferentially-oriented cord (Figures 1-3C).

As to the newly added limitation in claim 44 that the “at least one longitudinal fiber being oriented in the direction defined by the longitudinal axis,” Dudek shows in Figures 1 and 3B that the cords are aligned with the central longitudinal axis of the bushing.

**Claims 30 and 42-45** are rejected under 35 U.S.C. 103(a) as being unpatentable over Dudek, U.S. Pat. No. 3,869,113 in view of Hatch, U.S. Pat. No. 4,207,778 as previously stated in the Office Action submitted on February 13, 2002.

As to the newly added limitation that the composition shim has a central axis and that the circumferential fibers are oriented in a plane that is perpendicular to the central axis in claims 30 and 45, Dudek shows that the fibers are perpendicular to and *circumferentially* oriented around a central axis as shown in Figures 1 and 3A and in column 3, lines 3-13.

As to the newly added limitation in claim 43 that the shim has “a plurality of fibers,” Dudek shows more than one circumferentially-oriented cord (Figures 1-3C).

As to the newly added limitation in claim 44 that the “at least one longitudinal fiber being oriented in the direction defined by the longitudinal axis,” Dudek shows in Figures 1 and 3B that the cords are aligned with the central longitudinal axis of the bushing.

**Claims 30, 42-44, and 46** are rejected under 35 U.S.C. 103(a) as being unpatentable over Dudek, U.S. Pat. No. 3,869,113 in view of Hatch, U.S. Pat. No. 4,207,778 as previously stated in the Office Action submitted on February 13, 2002.

As to the newly added limitation that the composition shim has a central axis and that the circumferential fibers are oriented in a plane that is perpendicular to the central axis in claim 30,

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Dudek shows that the fibers are perpendicular to and *circumferentially* oriented around a central axis as shown in Figures 1 and 3A and in column 3, lines 3-13.

As to the newly added limitation in claim 43 that the shim has “a plurality of fibers,” Dudek shows more than one circumferentially oriented cord (Figures 1-3C).

As to the newly added limitation in claim 44 that the “at least one longitudinal fiber being oriented in the direction defined by the longitudinal axis,” Dudek shows in Figures 1 and 3B that the cords are aligned with the central longitudinal axis of the bushing.

As to the newly added limitation that “at least one longitudinal fiber and at least one lateral fiber that extend around the outer periphery of the shim” in claim 46, Hatch shows parallel circumferentially extending fibers in the rim of the composite (column 4, lines 29-36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use longitudinal fibers which extend around the outside of the damper because fibers arranged in this way exhibit high strength-to-weight ratios and better load carrying abilities.

### ***Response to Arguments***

Applicants' argument filed August 13, 2002 have been fully considered but they are not persuasive.

On pages 14-18, Applicants argue that Dudek does not show a central axis with a laminate structure including at least one circumferential fiber where the at least one circumferential fiber is located in a plane that is perpendicular to the central shim axis. Examiner disagrees. Dudek shows that the fibers are *circumferentially* oriented around a central axis as shown in Figures 1 and 3A and in column 3, lines 3-13. Dudek shows that the fibers encircle the central axis of the bushing and are perpendicular to the axis.

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On page 17, Applicants argue that Williams does not show a composite shim with a first composite layer having a circumferential fiber around the central shim axis where the fiber extends in a plane parallel to the central axis. Examiner is not persuaded because Williams is used *in combination with* Dudek to show that it would be obvious to orient the fibers in the angles of orientation as shown in instant claim 9 in order to optimize torsional strength, bending flexibility, and the ability to withstand compression loads. Further, Dudek shows in Figures 1-3C that the fibers can extend in a plane parallel to the central axis.

On page 17, Applicants argue that Clinard does not show a composite shim or nonextensible member having a fiber member provided in the shim. Examiner disagrees because Clinard is used in combination with Dudek to show that a laminated bearing (nonextensible member) non-extensible layers which comprises high strength fibers therein.

On page 17, Applicants argue that Hatch does not show circumferential fibers. Examiner is not persuaded because Hatch is used in combination with Dudek to show that it would have been obvious to use radially extending and parallel fibers because it is known that fibers arranged in this manner exhibit high strength-to-weight ratios and better load carrying abilities. Further, Dudek already shows the circumferential fibers.

### ***Conclusion***

Applicant's AMENDMENT necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**



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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly T. Nguyen whose telephone number is (703) 308-8176. The examiner can normally be reached on Monday to Friday, except on every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (703) 308-0449. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Kimberly T. Nguyen  
Examiner  
October 28, 2002

CYNTHIA H. KELLY  
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